

A. S. R.

State of California
Air Resources Board

EXECUTIVE ORDER A-20-7
Relating to Certification of New Motor Vehicles

ISUZU MOTORS LIMITED

Pursuant to the authority vested in the Air Resources Board by Sections 43100, 43102, and 43103 of the Health and Safety Code; and

Pursuant to the authority vested in the undersigned by Sections 39515 and 39516 of the Health and Safety Code and Executive Order G-45-3;

IT IS ORDERED AND RESOLVED: That Isuzu Motors Limited exhaust emission control systems for 1977 model-year passenger cars are certified for the engine family described below:

Engine Family: G180Z-B
Engine: 110.8 CID
Transmission: 4-speed manual, 3-speed automatic
Exhaust Emissions Control Systems: Air injection, Exhaust gas recirculation, Oxidation catalyst

Model: Opel by Isuzu, PF60 (Marketed by General Motors as Opel)

The following are the recommended values to be listed on the window decal required by California Assembly-Line Test Procedures for 1977 model vehicles:

<u>Engine Family</u>	<u>Hydrocarbons Grams per Mile</u>	<u>Carbon Monoxide Grams per Mile</u>	<u>Nitrogen Oxides Grams per Mile</u>
G180Z-B	0.31	4.7	1.0

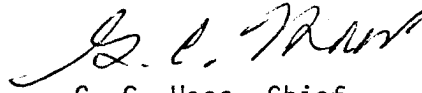
BE IT FURTHER RESOLVED: That this certification is contingent upon Isuzu Motors Limited affixing a permanent catalyst overheat warning label on the driver's sun-visor of all catalyst-equipped vehicles. This label must be approved by the Executive Officer.

BE IT FURTHER RESOLVED: That this certification is also contingent upon Isuzu Motors Limited listing in the owner's manual the operating cautions associated with a catalyst-equipped vehicle. This listing must be approved by the Executive Officer.

Vehicles certified under this Executive Order must conform to all applicable California emission regulations.

The Department of Motor Vehicles, the California Highway Patrol, and the Bureau of Automotive Repair will be notified by copy of this order and attachment.

Executed at El Monte, California, this 27 day of August, 1976.



G. C. Hass, Chief
Division of Vehicle Emissions Control

Manufacturer Isuzu Motors Limited Executive Order No. A-20-7 Page 1
 Engine Family G1807-B Engine (CID) 110.8 Engine Code _____
 Emission Control System AI, EGR, OC +10%(A/C) Yes No

Vehicle Models (If Coded see attachment)	Trans	Inertia Weight	Distributor	Fuel System	EGR System	Tune-Up Specification (1) Basic Timing (2) Idle Mixture (3) Idle Speed
			Type C,V	Type 1-2V	Part No. Service*	
			Mfgr. Part Number	Mfgr. Part Number		
Opel by Isuzu	M-4	2500	Nippon Denso LTD 8942065420	Nippon Kikaki LTD 8942142790, 8942093260, 8942136510	5161100010 No Service	See tune up label on page 2.
	A-3			8942093270, 8942136520 89421 42800		

Comments

Date of Issue 08/27/76 . Carb. PN8942136510 & 20 added by FF JPK-082, on 122977.
 Carb. PN8942142790 & 800 added by FF JPK-097, on 022878.

Abbreviations

Distributor
 C-Centrifugal Advance
 V-Vacuum Advance
 VR-Vacuum Retard
 HEI-High Energy Ignition
 EI-Electronic Ignition
Fuel System
 EFI, FI
 nV-nVenturi Carburetor
 VV-Variable Venturi

Exhaust Emission Control System


AI-Air Injection
 CAI-Catalyst Air Injection
 EFI-Electronic Fuel Injection
 EGR-Exhaust Gas Recirculation
 EM-Engine Modification
 EFE-Early Fuel Evaporation
 ESAC-Electronic Spark Advance Control
 FI-Fuel Injection

OC-Oxidation Catalyst
 PAI-Pulse Air Injection
 RC-Reduction Catalyst
 TR-Thermal Reactor
 TWC-Three Way Catalyst
 λ-Air Fuel Ratio Sensor
 *Service
 I-Inspect, repair/replace as needed
 R-Replace

Passenger Cars

Light Duty Trucks

For California

LOW ALTITUDE CERTIFICATION		VEHICLE EMISSION CONTROL INFORMATION	
		ISUZU MOTORS LIMITED	
		ENGINE TUNE-UP CONDITIONS: MAKE ALL ADJUSTMENT AT NORMAL OPERATING TEMPERATURE, CHOKE OPEN, AIR CLEANER INSTALLED, DISTRIBUTOR AND IDLE COMPENSATOR VACUUM LINES DISCONNECTED AND PLUGGED, ALL ACCESSORIES OFF, DASHPOT FULLY BOTTOMED IF INSTALLED, AND TRANSMISSION IN NEUTRAL, BOTH MANUAL AND AUTOMATIC. UNPLUG AND RECONNECT BOTH VACUUM LINES WHEN ADJUSTMENTS ARE COMPLETED. SET PARKING BRAKE AND BLOCK WHEELS.	
ENGINE TUNE-UP CONDITIONS: MAKE ALL ADJUSTMENT AT NORMAL OPERATING TEMPERATURE, CHOKE OPEN, AIR CLEANER INSTALLED, DISTRIBUTOR AND IDLE COMPENSATOR VACUUM LINES DISCONNECTED AND PLUGGED, ALL ACCESSORIES OFF, DASHPOT FULLY BOTTOMED IF INSTALLED, AND TRANSMISSION IN NEUTRAL, BOTH MANUAL AND AUTOMATIC. UNPLUG AND RECONNECT BOTH VACUUM LINES WHEN ADJUSTMENTS ARE COMPLETED. SET PARKING BRAKE AND BLOCK WHEELS.		0C, 1A, AND E.G.A. EXHAUST EMISSION CONTROL	
1. TURN THE IDLE MIXTURE ADJUST SCREW ALL THE WAY IN AND BACK OUT 3 TURNS. 2. ADJUST THROTTLE ADJUST SCREW TO 900 RPM. 3. ADJUST SETTING OF IDLE MIXTURE ADJUST SCREW TO ACHIEVE THE MAXIMUM SPEED. 4. RESET THROTTLE ADJUST SCREW TO 900 RPM. 5. TURN IDLE MIXTURE ADJUST SCREW CLOCKWISE(LEAN) UNTIL ENGINE SPEED IS DOWN TO 850 RPM. 6. RESET IDLE MIXTURE ADJUST SCREW 1/2 TURN COUNTERCLOCKWISE(RICH) FROM ITEM 5 POSITION. 7. RESET THROTTLE ADJUST SCREW TO 900 RPM. 8. IF AIR CONDITIONER IS INSTALLED : TURN A.C. ON MAX. COLD AND HIGH BLOWER. OPEN THE THROTTLE TO APPROX. 1/3 AND ALLOW THE THROTTLE TO CLOSE. (THIS ALLOWS THE SPEED-UP SOLENOID TO REACH FULL TRAVEL.) ADJUST THE SPEED-UP CONTROLLER ADJUSTING SCREW TO SET IDLE AT 900 RPM. 9. ADDITIONAL PROCEDURE IF DASHPOT IS INSTALLED : KEEP THE ENGINE SPEED BETWEEN 2400 RPM AND 2800 RPM, AND TURN THE DASHPOT UNTIL THE END OF THE DASHPOT SHAFT CONTACTS THE DASHPOT LEVER, THEN FULLY TIGHTEN THE LOCK NUT.		ENGINE 110.8 CU. IN. (1.8 LITER) G180Z-B G180Z-E OPEL BY ISUZU LUV	
IDLE SPEED AND IDLE MIXTURE SETTING PROCEDURE (IDLE SPEED DROP)		IDLE SPEED 900 RPM	
1. TURN THE IDLE MIXTURE ADJUST SCREW ALL THE WAY IN AND BACK OUT 3 TURNS. 2. ADJUST THROTTLE ADJUST SCREW TO 900 RPM. 3. ADJUST SETTING OF IDLE MIXTURE ADJUST SCREW TO ACHIEVE THE MAXIMUM SPEED. 4. RESET THROTTLE ADJUST SCREW TO 900 RPM. 5. TURN IDLE MIXTURE ADJUST SCREW CLOCKWISE(LEAN) UNTIL ENGINE SPEED IS DOWN TO 850 RPM. 6. RESET IDLE MIXTURE ADJUST SCREW 1/2 TURN COUNTERCLOCKWISE(RICH) FROM ITEM 5 POSITION. 7. RESET THROTTLE ADJUST SCREW TO 900 RPM. 8. IF AIR CONDITIONER IS INSTALLED : TURN A.C. ON MAX. COLD AND HIGH BLOWER. OPEN THE THROTTLE TO APPROX. 1/3 AND ALLOW THE THROTTLE TO CLOSE. (THIS ALLOWS THE SPEED-UP SOLENOID TO REACH FULL TRAVEL.) ADJUST THE SPEED-UP CONTROLLER ADJUSTING SCREW TO SET IDLE AT 900 RPM. 9. ADDITIONAL PROCEDURE IF DASHPOT IS INSTALLED : KEEP THE ENGINE SPEED BETWEEN 2400 RPM AND 2800 RPM, AND TURN THE DASHPOT UNTIL THE END OF THE DASHPOT SHAFT CONTACTS THE DASHPOT LEVER, THEN FULLY TIGHTEN THE LOCK NUT.		IDLE MIXTURE 900 RPM IDLE SPEED DROP 6° BTDC AT 900 RPM IGNITION TIMING 52° DWELL ANGLE 0.018 IN. BREAKER POINT GAP 0.030 IN. SPARK PLUG GAP 0.006 IN. VALVE LASH IN. 0.010 IN. EXH. (COLD)	
IGNITION TIMING SETTING PROCEDURE 1. SET IDLE SPEED TO 900 RPM. 2. CONNECT TIMING LIGHT LEAD TO NUMBER 1 CYLINDER. 3. ADJUST IGNITION TIMING WITH TIMING LIGHT AIMED TOWARD TIMING MARK. (ALIGN MARK ON CRANKSHAFT PULLEY TO TIMING MARK)		SEE SHOP MANUAL FOR ADDITIONAL INFORMATION.	
THIS VEHICLE CONFORMS TO U.S.E.P.A. REGULATIONS APPLICABLE TO 1977 MODEL YEAR NEW MOTOR VEHICLES. THIS VEHICLE CONFORMS TO CALIFORNIA REGULATIONS APPLICABLE TO 1977 MODEL YEAR NEW MOTOR VEHICLES.		CATALYST PT. NO. 8942107940	